

REMARKS

Claims 1-4 and 6-23 are now pending in the application. By this Paper, Claim 1 has been amended. The basis for this amendment can be found throughout the specification, claims, and drawings originally filed. No new matter has been added. The preceding amendment and the following remarks are believed to be fully responsive to the outstanding Office Action and are believed to place the application in condition for allowance.

The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendment and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sharood et al. (U.S. Pat. No. 6,453,687) alternatively in view of Kameshima et al. (JP 56010639) or Schulak (U.S. Pat. No. 5,743,109).

This rejection is respectfully traversed because none of the cited prior art teaches analyzing energy consumption based on weather data.

Independent Claim 1 calls for a method of managing a refrigeration system including transmitting energy consumption, maintenance indicator, and food condition data from the refrigeration system to a management center, wherein energy consumption is analyzed based on weather data. See Specification at pg. 4, Paragraph [0010] and at pg. 4, Paragraph [0012]. The energy consumption, maintenance indicator, and food condition data are analyzed at the management center to monitor and diagnose the performance of the refrigeration system in response to the analyzing.

See Specification at pg. 4, Paragraph [0010] and at pg. 4, Paragraph [0012]. Sharood, Kameshima, and Schulak fail to teach or suggest such a relationship.

The Examiner admits that Sharood fails to teach a method of managing a refrigeration system including analyzing energy consumption data. See Office Action mailed February 4, 2005 at pg. 3. The Examiner states, however, that Kameshima and Schulak demonstrate that the effect of outside weather/temperature conditions on the energy efficiency of refrigeration systems is well-known and that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to include such weather-related data in the analysis of the efficiency of the system of Sharood.” See Office Action mailed February 4, 2005 at pg. 3.

Applicants respectfully submit that Kameshima and Schulak fail to teach a method of managing a refrigeration system including analyzing energy consumption based on weather data. Applicants therefore respectfully disagree with the Examiner that it would have been obvious to one of ordinary skill in the art to modify Sharood to include energy consumption analysis based on weather data.

Applicants respectfully submit that Kameshima fails to teach analyzing *weather data*. Kameshima teaches a predicting device (1) that *predicts* air conditioning load and weather patterns. The predicted air conditioning load and weather patterns are used to determine an optimal refrigerator operating mode – not analyze energy consumption - using an operating device (2) and memory unit (3). See English Abstract of Kameshima. Further, the predictions of Kameshima are not “weather data,” but are merely *predictions* of future weather patterns. Applicants note that the term “data” is ordinarily understood to mean “factual information.” See Merriam-Webster’s Collegiate

Dictionary, Merriam-Webster, Incorporated (1999) (Reproduced in relevant part and attached herewith). The weather predictions taught by Kameshima cannot be considered weather “data,” as predictions attempt to foretell the future and would not be considered *factual*. Therefore, Applicants respectfully submit that Kameshima fails to teach or suggest a method of managing a refrigeration system including analyzing energy consumption based on weather data.

Schulak fails to teach or suggest analyzing weather conditions for use in analyzing energy consumption of a refrigeration system. Schulak teaches an energy transfer system (12) for use with a household appliance, such as a refrigerator, that includes a condenser (16) disposed within a compartment (24). See Schulak at Col. 2, Ins. 58-66. The compartment is coupled to outside air via conduits (28, 30) to transfer heat from the condenser to outside air. See Schulak at Col. 3, Ins. 10-18. Schulak merely notes that the outside air must be “low enough” to allow a reduction in condenser temperature. See Schulak at Col. 4, Ins. 49-54. Schulak does not teach or suggest using data indicative of the outside air temperature in controlling operation of the energy transfer system. Therefore, Schulak fails to teach or suggest a method of managing a refrigeration system including energy consumption analysis based on weather data.

Because Sharood does not disclose a method of managing a refrigeration system including analyzing energy consumption based on weather data, and none of the cited references cures this deficiency of Sharood, Applicants’ invention is not taught or suggested by the prior art. Thus, it is believed that independent Claim 1, as well as Claims 2-4 and 6-23, dependent therefrom, are in a condition for allowance in light of


the art of record. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: May 4, 2005

By: 
Michael Malinzak, Reg. No. 43,770

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

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ion esp. as

roof of courage (dared him to jump) b: to confront boldly: DEFY
ked the anger of his family) 2: to have the courage to contend
inst, venture, or try (the actress dared a new interpretation of this
role) — **dar-er** \där-är, -der- \ n
1594) 1: an act or instance of daring: CHALLENGE (foolishly
a ~) 2: imaginative or vivacious boldness: DARING
dev-il \där-de-vl, -der- \ n (1794): a recklessly bold person —
dev-il-ry \-vl-rē \ n — **dare-devil-try** \-vl-trē \ n
devil adj (1832): recklessly and often ostentatiously daring **syn**
ADVENTUROUS
ful adj (1605) obs: DARING
n't \där-ont, -der- \: dare not; dared not
say \där-sä, -der- \ vt (13c): venture to say; think probable —
in pres. 1st sing. ~ vi: AGREE, SUPPOSE — used in pres. 1st sing.
ing adj (1582): venturesomely bold in action or thought **syn** see
VENTUROUS — **dar-ing-ly** \-in-lē \ adv — **dar-ing-ness** n
ing n (1651): venturesome boldness
ee-ling \där-jē-lin \ n [Darjeeling, India] (1907): a tea of high
lly grown esp. in the mountainous districts of northern India
ark \därk \ adj [ME *derk*, fr. OE *deorc*; akin to OHG *tarchannen* to
(bef. 12c) 1 a: devoid or partially devoid of light: not receive-
reflecting, transmitting, or radiating light b: transmitting only a
tion of light 2 a: wholly or partially black b of a color: of low
very low lightness 3 a: arising from or showing evil traits or
res: EVIL (the ~ powers that lead to war) b: DISMAL, GLOOMY
d a ~ view of the future) c: lacking knowledge or culture 4
not clear to the understanding 5: not fair in complexion: SWARTHY
SECRET (kept his plans ~) 7: possessing depth and richness (a ~
ice) 8: closed to the public (the theater is ~ in the summer) **syn**
OBSCURE — **dark-ish** \där-kish \ adj — **dark-ly** adv — **dark-ness**
ark n (13c) 1 a: a place or time of little or no light: NIGHT, NIGHT-
all b: absence of light: DARKNESS 2 a: dark or deep color — in
the dark 1: in secrecy (most of his dealings were done in the dark)
in ignorance (kept the public in the dark about the agreement)
ark vi (14c) obs: to grow dark ~ vt: to make dark
ark adaptation n (1909): the phenomena including dilation of the
uppl, increase in retinal sensitivity, shift of the region of maximum
minosity toward the blue, and regeneration of visual purple by which
the eye adapts to conditions of reduced illumination — **dark-adapt-**
d \därk-ə-dap-təd \ adj
ark age n (1730) 1: a time during which a civilization undergoes a
cline: as a pl, cap D&A: the European historical period from about
A.D. 476 to about 1000; broadly: MIDDLE AGES b often pl, often cap
D&A: the Greek historical period of three to four centuries from about
1100 B.C. 2 a often pl, often cap D&A: the primitive period in the
development of something (in the 1890s, way back in baseball's Dark
Ages — R. W. Creamer) b often pl, often cap D&A: a state of stagna-
tion or decline
ark-en \där-kən \ vb **dark-ened**; **dark-en-ing** \där-kə-nin \ vi (14c)
1: to grow dark: to become obscured 2: to become gloomy ~ vt 1
to make dark 2: to make less clear: OBSCURE (the financial crisis
ed the future of the company) 3: TAINT, TARNISH 4: to cast a
loom over ~ 5: to make of darker color — **dark-en-er** \-kə-nər \ n
ark field n (1865): the dark area that serves as the background for
objects viewed in an ultramicroscope
ark-field microscope n (1926): ULTRAMICROSCOPE
ark horse n (1831) 1 a: a usu. little known contender (as a race-
horse) that makes an unexpectedly good showing b: an entrant in a
contest that is judged unlikely to succeed 2: a political candidate
unexpectedly nominated usu. as a compromise between factions
ark lantern n (1650): a lantern that can be closed to conceal the
light
ark-le \där-kəl \ vi **dar-kled**; **dar-king** \-k(ə-)lin \ [back-formation
fr. *darkling*] (1800) 1 a: to become clouded or gloomy b: to grow
dark 2: to become concealed in the dark
ark-ling \där-kin \ adv [ME *derkelyng*, fr. *derk* dark + *-lyng* -ling]
(15c): in the dark
ark-ling adj (1739) 1: DARK 2: done or taking place in the dark
arkling beetle n (1816): TENEBRIONID
ark matter n (1982): nonluminous matter not yet directly detected
by astronomers that is hypothesized to exist because the visible matter
in the universe is insufficient to account for various observed gravita-
tional effects
ark reaction n (1927): any of a series of chemical reactions in photo-
synthesis not requiring the presence of light and involving the reduc-
tion of carbon dioxide to form carbohydrate; also: CALVIN CYCLE
ark-room \därk-rüm, -rüm \ n (1841): a room with no light or with
a safelight for handling and processing light-sensitive photographic
materials
ark-some \därk-səm \ adj (ca. 1530): gloomily somber: DARK
arky or dark-le \där-kē \ n, pl **darkies** (1775) usu offensive: a black
person
dar-ling \där-lin \ n [ME *derling*, fr. OE *deorling*, fr. *deore* dear] (bef.
12c) 1: a dearly loved person 2: FAVORITE
darling adj (1509) 1: dearly loved: FAVORITE 2: very pleasing
CHARMING — **dar-ling-ly** \-in-lē \ adv — **dar-ling-ness** n
darn \därn \ vb [perh. fr. F dial. *darnier*] vt (ca. 1600) 1: to mend
with interlacing stitches 2: to embroider by filling in with long run-
ning or interlacing stitches ~ vi: to do darn — **darn-er** n
darn n (1720): a place that has been darned (a sweater full of ~s)
darn adj or adv [euphemism] (1781): DAMNED
darn vb (1781): DAMN — **darned** \därnd \ adj or adv
darn n (1840): DAMN
dar-nel \där-nəl \ n [ME] (14c): any of several usu. weedy grasses
(genus *Lolium*)
darning needle n (1761) 1: a long needle with a large eye for use in
darning 2: DRAGONFLY, DAMSELFLY
dart \därt \ n [ME, fr. MF, of Gmc origin; akin to OHG *tart* dart; OE
daroth] (14c) 1 a *archaic*: a light spear b (1): a small missile usu.
with a pointed shaft at one end and feathers at the other (2) pl but sing
in constr: a game in which darts are thrown at a target 2 a: some-
thing projected with sudden speed; esp: a sharp glance b: something
causing sudden pain or distress (~s of sarcasm) 3: something with a

slender pointed shaft or outline; *specif*: a stitched tapering fold in a
garment 4: a quick movement (made a ~ for the door)
dart vt (1580) 1: to throw with a sudden movement 2: to thrust or
move with sudden speed 3: to shoot with a dart containing a usu.
tranquilizing drug ~ vi: to move suddenly or rapidly (~ed across
the street)
dart-board \därt-börd, -börd \ n (1901): a usu. circular board (as of
compressed bristles) used as a target in the game of darts
darter \där-tər \ n (1813) 1: ANHINGA 2: any of numerous small
American freshwater bony fishes (esp. genera *Ammocrypta*, *Etheos-*
toma, and *Percina* of the family Percidae)
Dar-win-i-an \där-wi-nē-ən \ adj (1860): of or relating to Charles
Darwin, his theories esp. of evolution, or his followers — **Darwinian**
n
Dar-win-ism \där-wə-ni-zəm \ n (1864): a theory of the origin and
perpetuation of new species of animals and plants that offspring of a
given organism vary, that natural selection favors the survival of some
of these variations over others, that new species have arisen and may
continue to arise by these processes, and that widely divergent groups
of plants and animals have arisen from the same ancestors; broadly
: biological evolutionism — **Dar-win-ist** \-wə-nist \ n or adj
Dar-win's finches \där-wənz \ n pl [Charles Darwin] (1947): finches
of a subfamily (Geospizinae) having great variation in bill shape and
confined mostly to the Galapagos islands
Dar-win tulip \där-wən \ n (1889): a tall late-flowering tulip with
the flowers single and of one color
dash \dash \ vb [ME *daschen*] vt (13c) 1: to break by striking or
knocking 2: to knock, hurl, or thrust violently 3: SPLASH, SPATTER
4 a: RUIN, DESTROY (the news ~ed his hopes) b: DEPRESS, SADDEN c
: to make ashamed 5: to affect by mixing in something different (his
delight was ~ed with bitterness over the delay) 6: to complete, exe-
cute, or finish off hastily — used with down or off (~ed down a drink)
(~off a letter) 7 [euphemism]: DAMN 4 ~ vi 1: to move with
sudden speed (~ed through the rain) 2: SMASH
dash n (14c) 1 a *archaic*: BLOW b (1): a sudden burst or splash
(2): the sound produced by such a burst 2 a: a stroke of a pen b
: a punctuation mark — that is used esp. to indicate a break in the
thought or structure of a sentence 3: a small usu. distinctive addition
(a ~ of salt) (a ~ of humor) 4: flashy display 5: animation in
style and action 6 a: a sudden onset, rush, or attempt b: a short
fast race 7: a long click or buzz forming a letter or part of a letter (as
in Morse code) 8: DASHBOARD 2
dash-board \dash-börd, -börd \ n (1846) 1: a screen on the front of
a usu. horse-drawn vehicle to intercept water, mud, or snow 2: a
panel extending across the interior of a vehicle (as an automobile) be-
low the windshield and usu. containing dials and controls
dashed \dash \ adj (ca. 1889): made up of a series of dashes
dash-er \da-shər, -dä- \ n [origin unknown] (ca. 1899): TARO
dash-er \da-shər \ n (1790) 1: a dashing person 2: one that dashes;
specif: a device having blades for agitating a liquid or semisolid
dashi \dä-(-)shē \ n [Jp, broth] (ca. 1961): a fish broth made from
dried bonito
dash-ki-ki \dä-shē-kē, -dä- \ n [modif. of Yoruba *dāṣíkí*] (ca. 1968)
: a usu. brightly colored loose-fitting pullover garment
dash-ing adj (1796) 1: marked by vigorous action: SPIRITED (a ~
young horse) 2: marked by smartness esp. in dress and manners —
dash-ing-ly \-in-lē \ adv
dash-pot \dash-pāt \ n (1861): a device for cushioning or damping a
movement (as of a mechanical part) to avoid shock
das-sie \da-sē \ n [Afrik] (1786): HYRAX
das-tard \das-tərd \ n [ME] (15c) 1: COWARD 2: a person who acts
treacherously or underhandedly
das-tard-ly \lē \ adj (1542) 1: COWARDLY 2: characterized by un-
derhandedness or treachery (a ~ attack) (a ~ villain) **syn** see COW-
ARDLY — **das-tard-li-ness** n
da-ta \dä-tə, -dä- \ also \dä- \ n pl but sing or pl in constr, often attrib. [L.
pl. of *datum*] (1646) 1: factual information (as measurements or
statistics) used as a basis for reasoning, discussion, or calculation (the
~ is plentiful and easily available — H. A. Gleason, Jr.) (comprehen-
sive ~ on economic growth have been published — N. H. Jacoby) 2
: information output by a sensing device or organ that includes both
useful and irrelevant or redundant information and must be processed
to be meaningful 3: information in numerical form that can be digi-
tally transmitted or processed
usage Data leads a life of its own quite independent of datum, of
which it was originally the plural. It occurs in two constructions: as a
plural noun (like *earnings*), taking a plural verb and plural modifiers
(as *these, many, a few*) but not cardinal numbers, and serving as a
referent for plural pronouns (as *they, them*); and as an abstract mass
noun (like *information*), taking a singular verb and singular modifiers
(as *this, much, little*), and being referred to by a singular pronoun (*it*).
Both constructions are standard. The plural construction is more
common in print, evidently because the house style of several publish-
ers mandates it.
data bank n (1966): DATABASE
da-ta-base \dä-tə-bās, -dä- \ also \dä- \ n (ca. 1962): a usu. large collec-
tion of data organized esp. for rapid search and retrieval (as by a com-
puter)
data processing n (1954): the converting of raw data to machine-
readable form and its subsequent processing (as storing, updating,
combining, rearranging, or printing out) by a computer — **data pro-**
cessor n
data structure n (1963): any of various methods of organizing data
items (as records) in a computer
date \dät \ n [ME, fr. OF, ultim. fr. L. *dactylus* — more at DACTYL]
(14c) 1: the oblong edible fruit of a palm (*Phoenix dactylifera*) 2
: the tall palm with pinnate leaves that yields the date

\ə \ abut \ʌ \ kitten, F table \ər \ further \ə \ ash \ā \ ace \ä \ mop, mar
\au \ out \ch \ chin \e \ bet \ē \ easy \g \ go \i \ hit \i \ ice \j \ job
\j \ sing \ö \ go \ö \ law \oi \ boy \th \ thin \th \ the \ü \ loot \ü \ foot
\y \ yet \zh \ vision \ä, k, p, æ, œ, ue, ü, see Guide to Pronunciation

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